

Rapid HIV Testing (12/05)

Landrum ML, Wilson CH, Perri LP, Hannibal SL, O'Connell RJ. Usefulness of a rapid human immunodeficiency virus–1 antibody test for the management of occupational exposure to blood and body fluid. *Infect Control Hosp Epidemiol* 2005;26:768–774.

This study describes the usefulness of a rapid human immunodeficiency virus (HIV) test (OraQuick Rapid HIV-1 Antibody Test [OraSure Technologies, Bethlehem, PA]) following an occupational exposure incident. The authors investigated the accuracy of OraQuick compared with the standard enzyme immunoassay (EIA) for source-patient testing in the occupational exposure setting using sera and the effects on postexposure prophylaxis (PEP) use, cost, and occupational exposure-related stress reaction symptoms in health-care personnel (HCP). After exclusion, there were 71 exposures in the EIA group and 79 in the OraQuick group. OraQuick results were 100% concordant with the reference standard of EIA and Western blot using patient sera. The mean number of doses ingested per course of PEP was significantly higher for HCP in the EIA group (3.8; range, 0 to 6) compared with the OraQuick group (1.2; range, 0 to 3; $P = .016$). Cost analysis revealed a mean savings of \$6.62 with the OraQuick test per occupational exposure. Although the survey failed to detect an overall reduction in HCP stress reaction symptoms using OraQuick for source-patient testing, 11 HCWs in the EIA group had repetitive thoughts of the exposure compared with five in the OraQuick group ($P = .049$). **Because of the reduction in ingested doses of unnecessary PEP and reduced cost of occupational exposure management with their use, rapid HIV-antibody tests should be the preferred method for source-patient testing following an occupational exposure**



DECS Comment: Because rapid HIV-antibody tests can provide test results in as little as 20 minutes, they can facilitate making timely decisions regarding use of HIV PEP after occupational exposure incidents. According to the Centers for Disease Control and Prevention (CDC), the use of rapid HIV tests for evaluation of source patients has increased; during 1995–1997, none of the 25 National Surveillance System for Healthcare Workers (NaSH) facilities used rapid HIV tests, whereas in 2004, a total of 21 (84%) did.¹ Additional information about rapid HIV-antibody tests is available by visiting the CDC Web site at: www.cdc.gov/hiv/topics/testing/rapid/.

Reference

1. CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis. *MMWR* 2005;54(No. RR-9):1–17.